

**INERTIAL THREE GIMBALED DEMONSTRATOR, DEVICE 6D11****TRAINING CATEGORY:**

BASIC SCIENCE (2) (Physics-Nuclear)

**ORIGINATING AGENCY:**

DCNO (AIR); NAVTRASYSSEN

**SECURITY CLASSIFICATION:**

Device 6D11 is unclassified.

**INTENDED USE:**

The device is intended for use in a classroom for demonstration of a three gimbal inertial system.

**FUNCTIONAL DESCRIPTION:**

Device 6D11 is a three gimbal demonstrator constructed of clear plastic and mounted on a wood base. It may be rotated horizontally and vertically to demonstrate the system and to permit easy viewing from any angle.

The three (3) gimbals of this system are the pitch gimbal (outer), the roll gimbal (middle), and the azimuth gimbal (inner).

The outer gimbal ring is clear plastic, the middle gimbal ring is either red or black plastic, and the accelerometers and gyros are clear plastic. Each gyro and accelerometer sensing axis is indicated by colored doweling.

The gimbal rings may be rotated by the instructor or trainee to display the system's components and functions.

By manually positioning the gimbals, a demonstration of relationship of the gyro and accelerometer axis under various combinations of speed, heading, etc., may be accomplished.

**PHYSICAL INFORMATION:**

Material: Clear and colored plastic wood base  
Height: 26-1/4"  
Base: 16" x 28-1/2"  
Weight: 35 lbs.

## DIRECTORY OF NAVAL TRAINING DEVICES

## INSTALLATION AREA:

Classroom

## PUBLICATIONS FURNISHED:

Summary of Three Gimbal Inertial Demonstrator, NAVSO P-3107.

## PERSONNEL:

**Instructor:** Officer, Chief, or PO-type personnel qualified in gimbal inertial guidance systems and SINS.

**Operators:** Instructor or Trainee

**Trainees:** Class up to thirty (30) trainees

**Maintenance:** Nominal, consisting of routine cleaning only.

## CONTRACT IDENTIFICATION:

Manufactured by Naval Training Systems Center Regional Office, East Coast under TAAD No. 5479.

## LOCAL STOCK NUMBER:

6910-LL-C00-0276